UNITED STATES DISTRICT COURT WESTERN DISTRICT OF TEXAS AUSTIN DIVISION

AC TECHNOLOGIES, S.A., Plaintiffs	§ § §	Case No. 1:14-CV-00813-LY
v.	§ §	
AMAZON.COM, INC., Defendant	§ §	

REPORT AND RECOMMENDATION OF THE UNITED STATES MAGISTRATE JUDGE

TO: THE HONORABLE LEE YEAKEL UNITED STATES DISTRICT JUDGE

Before the Court are Amazon's Motion for Summary Judgment of Non-infringement and Invalidity (Dkt. 179) and Plaintiffs' Motion for Summary Judgment on Validity (Dkt. 181), both filed August 10, 2021, and the associated response and reply briefs. The District Court referred the motions to the undersigned Magistrate Judge for Report and Recommendation, pursuant to 28 U.S.C. § 636(b)(1)(B), Federal Rule of Civil Procedure 72, and Rule 1(d) of Appendix C of the Local Rules of the United States District Court for the Western District of Texas. Dkt. 220.

I. Introduction

Via Vadis and AC Technologies, S.A. ("Plaintiffs") are the owner and exclusive licensee, respectively, of U.S. Patent No. RE40,521 (the "'521 Patent"), entitled "Data Access and Management System as Well as a Method for Data Access and Data Management for a Computer System." Dkt. 181-2 at 2. The '521 Patent covers a method of data access and management in computer networks that allows users to quickly access changing data by communicating directly

with any other computer in the network. *Id.* at 6. Claims of the '521 Patent cover the operations of peer-to-peer networks (the "Asserted Claims").

On August 22, 2014, Plaintiffs filed suit against Defendant Amazon.com, Inc. ("Amazon"), alleging that Amazon's software-as-a-service and related web services directly and indirectly infringed the '521 Patent "by supporting the BitTorrent protocol, or other infringing peer to peer file distribution protocol, to transfer files and other data between electronic devices, such as computers" (the "Accused BitTorrent System"). Second Amended Complaint, Dkt. 112 ¶ 17. The BitTorrent protocol is a "peer to peer file distribution protocol that allows multiple networked users to simultaneously upload and download segments or pieces of the same file to and from each other." *Id.* ¶ 14. Amazon deployed BitTorrent as part of the launch of its Amazon Web Services Simple Storage Service ("S3") cloud storage platform. Dkt. 189 at 7 (citing Dkt. 190-1 (Zeidman Expert Report ¶ 59 (sealed))). Amazon contends that the '521 Patent is invalid. Dkt. 115 at 8.

The parties cross-move for summary judgment under Federal Rule of Civil Procedure 56 as to validity of the '521 Patent. Amazon also asks the Court to find as a matter of law that the Accused BitTorrent System does not infringe the '521 Patent.

II. The '521 Patent

The United States Patent and Trademark Office ("USPTO") reissued the '521 Patent on September 23, 2008. Dkt. 181-2 at 2. The '521 Patent claims priority to a foreign patent application filed by Thomas Binzinger on January 11, 1999 (the "German Application"). *Id.* The abstract describes the invention as "permit[ting] improved data access and data management in a computer system" by dividing the data and storing it "in such a way that the partial data [] being accessed and managed are present in the computer system in a redundant manner." *Id.*

Claim 30 of the '521 Patent recites, in part,

A method for data access and data management for a computer system, comprising:

storing data in at least two data storage means;

accessing stored data by at least one computer unit via data transmission means, with prespecified parameters of the data transmission between the **data storage means** and the computer unit being determined, the data being stored in a redundant manner in at least two of the at least two **data storage means** as a function of the determined prespecified parameters of the data transmission, the access to the data being effected as a function of the determined prespecified parameters of the data transmission;

detecting prespecified parameters for data transmissions between the data storage means; and

shifting redundantly stored data independent of an access of the computer unit to the data as a function of the determined prespecified parameters of the data transmission between the **data storage means**.

Id. at 20 (emphasis added). Claims 31 through 45 depend on Claim 30 and therefore contain the limitations of Claim 30. *See In re Lange*, 644 F.2d 856, 862 n.9 (C.C.P.A. 1981) (stating that "every dependent claim includes all limitations of the independent claim").

The District Court construed the claim term "data storage means" as "one or more memory cells, each cell storing: (1) one field of information; and (2) the other locations within the system where copies of the cell are located; where the information in every cell is copied the same number of times throughout the system." Dkt. 67 at 4. The District Court further construed "parameters for data transmission" as

duration of transmission, fault rate, duration of data processing operations of individual data storage means prior to transmission, transmission quality, transmission rate, computing performance, network performance, or other performance measures.

Dkt. 59 at 35. In addition, the District Court adopted the parties' agreed construction of the claim term "shifting" to mean that "data is copied to a new location and no longer available at one of the previous locations." *Id.* at 6.

III. Legal Standard

Summary judgment shall be rendered when the pleadings, the discovery and disclosure materials, and any affidavits on file show that there is no genuine dispute as to any material fact and that the moving party is entitled to judgment as a matter of law. FED. R. CIV. P. 56(a); *Celotex Corp. v. Catrett*, 477 U.S. 317, 323-25 (1986); *Washburn v. Harvey*, 504 F.3d 505, 508 (5th Cir. 2007). A dispute regarding a material fact is "genuine" if the evidence is such that a reasonable jury could return a verdict in favor of the nonmoving party. *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986). When ruling on a motion for summary judgment, the court is required to view all inferences drawn from the factual record in the light most favorable to the nonmoving party. *Matsushita Elec. Indus. Co. v. Zenith Radio*, 475 U.S. 574, 587 (1986); *Washburn*, 504 F.3d at 508. A court "may not make credibility determinations or weigh the evidence" in ruling on a motion for summary judgment. *Reeves v. Sanderson Plumbing Prods., Inc.*, 530 U.S. 133, 150 (2000); *see also Anderson*, 477 U.S. at 254-55.

Once the moving party has made an initial showing that there is no evidence to support the nonmoving party's case, the party opposing the motion must come forward with competent summary judgment evidence of the existence of a genuine fact issue. *Matsushita*, 475 U.S. at 586. Mere conclusory allegations are not competent summary judgment evidence and thus are insufficient to defeat a motion for summary judgment. *Turner v. Baylor Richardson Med. Ctr.*, 476 F.3d 337, 343 (5th Cir. 2007). Unsubstantiated assertions, improbable inferences, and unsupported speculation also are not competent summary judgment evidence. *Id.* The party

opposing summary judgment is required to identify specific evidence in the record and to articulate the precise manner in which that evidence supports its claim. *Adams v. Travelers Indem. Co. of Conn.*, 465 F.3d 156, 164 (5th Cir. 2006). If the nonmoving party fails to make a showing sufficient to establish the existence of an element essential to its case and on which it will bear the burden of proof at trial, summary judgment must be granted. *Celotex*, 477 U.S. at 322-23.

IV. Analysis

The Court addresses validity first, then turns to Defendant's infringement argument.

A. Validity

Plaintiffs argue that the Court should grant summary judgment that the '521 Patent is valid because (1) there is no genuine issue of material fact that the patent's priority date is January 11, 1999, as the patents and application to which it claims priority have adequate written descriptions of claim elements; (2) there is no evidence that prior art anticipates the Asserted Claims; and (3) the Asserted Claims are definite and enabled. Dkt. 181 at 5. In the alternative, Plaintiffs seek partial summary judgment on the individual grounds raised in their motion. *Id.* at 5, 24. In its crossmotion, Amazon argues that the Court should find the Asserted Claims invalid as a matter of law for indefiniteness, Dkt. 179 at 23-25.

Patents are presumed to be valid. *Ruiz v. A.B. Chance Co.*, 234 F.3d 654, 662 (Fed. Cir. 2000). The party challenging the validity of a patent bears the burden of proving the factual elements of invalidity by clear and convincing evidence. *Pfizer v. Apotex, Inc.*, 480 F.3d 1348, 1359 (Fed. Cir. 2007). Although the burden of showing validity never shifts to the patentee, a patentee "would be well advised to introduce evidence sufficient to rebut that of the challenger" once a prima facie case for invalidity is made. *Id.* at 1360 (citing *Orthokinetics, Inc. v. Safety Travel Chairs, Inc.*, 806 F.2d 1565, 1570 (Fed. Cir. 1986)).

1. Priority Date

When priority is based on subject matter disclosed in a foreign patent application whose filing date is properly claimed under 35 U.S.C. § 119(a), the foreign application has the same effect as if filed in the United States. *Frazer v. Schlegel*, 498 F.3d 1283, 1287 (Fed. Cir. 2007). "To obtain the benefit of the filing date of a parent application, the claims of the later-filed application must be supported by the written description in the parent 'in sufficient detail that one skilled in the art can clearly conclude that the inventor invented the claimed invention as of the filing date sought." *Anascape, Ltd. v. Nintendo of Am., Inc.*, 601 F.3d 1333, 1335 (Fed. Cir. 2010) (quoting *Lockwood v. Am. Airlines, Inc.*, 107 F.3d 1565, 1572 (Fed. Cir. 1997)). This "test requires an objective inquiry into the four corners of the specification from the perspective of a person of ordinary skill in the art." *Ariad Pharms., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010). "The specification must describe an invention understandable to that skilled artisan and show that the inventor actually invented the invention claimed." *Id.* Whether a patent complies with the written description requirement is a question of fact. *PIN/NIP, Inc. v. Platte Chem. Co.*, 304 F.3d 1235, 1243 (Fed. Cir. 2002).

Plaintiffs assert that the '521 Patent's specification is "substantively identical to the specification of the German Application," as evidenced by text of the respective specifications and the testimony of their expert Dr. Jose Melendez. Dkt. 181 at 9; Dkt. 181-2; Dkt. 181-10; Dkt. 182-4 (Melendez Expert Report) ¶¶ 53-91, 122 (sealed). Plaintiffs state that the USPTO reissued the '521 Patent "to specifically identify (and evaluate) that claim of priority" to the German Application, citing the August 17, 2007 Examiner's Amendment. Dkt. 181 at 9; Dkt. 181-8 at 3. Plaintiffs argue that there is no genuine factual dispute that the German Application's specification contains an

adequate written description for each element of the Asserted Claims, and the '521 Patent therefore is entitled to a January 11, 1999 priority date.

Amazon contends that the "detecting prespecified parameters" and "shifting" limitations in Claim 30 were added to the July 10, 2001 U.S. application that would become the '521 Patent. Dkt. 187 at 8; Dkt. 181-7. Amazon's expert Dr. David Ratner opined that the two limitations lack written description in the German Application, and the Asserted Claims therefore are not entitled to the January 11, 1999 priority date. Dkt. 187-2 (Ratner Expert Report) ¶¶ 2, 125-41.

Amazon has submitted sufficient evidence to create a genuine issue of material fact as to the priority date of the '521 Patent, specifically, whether the specification discloses the "detecting prespecified parameters" and "shifting" limitations. Accordingly, the undersigned recommends that Plaintiffs' motion for partial summary judgment as to the priority date of the '521 Patent be denied.

2. Anticipation

Anticipation under § 102 is a two-step inquiry. *Medichem, S.A. v. Rolabo, S.L.*, 353 F.3d 928, 933 (Fed. Cir. 2003). The first step is claim construction. *Id.*; *see also Amazon.com, Inc. v. Barnesandnoble.com, Inc.*, 239 F.3d 1343, 1351 (Fed. Cir. 2001) ("A claim must be construed before determining its validity just as it is first construed before deciding infringement.") (quoting *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 996 n.7 (Fed. Cir. 1995)). The second step is a comparison of the properly construed claim to the prior art. *Medichem*, 353 F.3d at 933.

To anticipate a claim, "a single prior art reference must expressly or inherently disclose each claim limitation." *Finisar Corp. v. DirecTV Grp., Inc.*, 523 F.3d 1323, 1334 (Fed. Cir. 2008). A claim limitation is inherently disclosed if it is necessarily present in the single anticipating reference. *Schering Corp. v. Geneva Pharms., Inc.*, 339 F.3d 1373, 1377 (Fed. Cir. 2003). If a

"claimed invention was patented, described in a printed publication, or in public use, on sale, or otherwise available to the public before the effective filing date of the claimed invention," prior art anticipates the patent. 35 U.S.C. § 102(a)(1). Judgment as a matter of law is appropriate when no reasonable juror could dispute the clear text of a prior art reference. *Finisar*, 523 F.3d at 1338.

Amazon relies on two prior art systems, SwarmCast and Mojo Nation, which "act in essentially the same way as the accused BitTorrent system." Dkt. 187 at 14. Amazon contends that the systems were in use on or before July 10, 2001, which it avers is the correct priority date for the Asserted Claims in the '521 Patent. *Id.* at 15. Amazon submits evidence that the first system, Mojo Nation, was in public use at least as early as August 15, 2000. Dkt. 187-2 (Ratner Expert Report) ¶¶ 110, 172-73. The parties agree that there is evidence that SwarmCast was available as early as October 2000. Dkt. 187 at 15; Dkt. 181 at 15. Plaintiffs argue that these systems should be excluded as references as a matter of law because neither predates the January 11, 1999 priority date established by the German Application, and also that there is no evidence either system meets the "storing" or "shifting limitations." Dkt. 195 at 9; *see also* Dkt. 181 at 14.

As stated above, genuine issues of material fact preclude summary judgment on the priority date of the '521 Patent. Because there are genuine fact issues as to whether the priority date is in 1999 or 2001, and there is evidence that both SwarmCast and Mojo Nation were in public use in the year 2000, summary judgment should be denied as to whether Mojo Nation and SwarmCast are prior art that anticipates the Asserted Claims of the '521 Patent. *See Erfindergemeinschaft UroPep GbR v. Eli Lilly & Co.*, 240 F. Supp. 3d 605, 620 (E.D. Tex. 2017) (finding that open factual questions regarding whether reference could be considered prior art foreclosed summary judgment on issue of anticipation).

3. Indefiniteness

"The Patent Act requires that a patent specification 'conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as [the] invention." *Nautilus v. Biosig Instruments, Inc.*, 572 U.S. 898, 901 (2014) (quoting 35 U.S.C. § 112). "A patent is indefinite 'if its claims, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention." *Presidio Components, Inc. v. Am. Tech. Ceramics Corp.*, 875 F.3d 1369, 1375 (Fed. Cir. 2017) (quoting *Nautilus*, 572 U.S. at 901). However, "[a] patent need not explicitly include information that is already well known in the art." *Id.* at 1376.

A determination of claim indefiniteness is a legal conclusion reached by the court performing its duty as the "construer of patent claims." *Auto-Dril, Inc. v. Nat'l Oilwall Varco, LP*, 304 F. Supp. 3d 587, 606 (S.D. Tex. 2018) (quoting *Tech. Licensing Corp. v. Videotek, Inc.*, 545 F.3d 1316, 1338 (Fed. Cir. 2008)). "To the extent there are any factual findings upon which a trial court's indefiniteness conclusion depends, they must be proven by the challenger by clear and convincing evidence." *Id.* Courts may find a term invalid for indefiniteness during claim construction or elect to wait until the summary judgment stage. *ConocoPhillips Co. v. In-Depth Compression Seismic, Inc.*, No. H-18-0803, 2019 WL 1877374, at *18 (S.D. Tex. Apr. 26, 2019).

Amazon argues that the "shifting" limitation is indefinite because a person of ordinary skill in the art would not be able to understand its scope under Plaintiffs' "overbroad re-interpretation" of the term. Dkt. 187 at 21; *see also* Dkt. 179 at 23-25. Amazon contends that, under Plaintiffs' infringement theory, "shifting" can occur even when data copying and data unavailability "are causally and temporally unrelated." Dkt. 179 at 23. A person of ordinary skill in the art "could not know whether the data has been 'shifted' because years could pass before the data becomes

unavailable at a prior location, leaving in limbo the question of whether the 'shifting' limitation might later be met." *Id.* at 24. Amazon submits expert testimony from Jose Melendez and Robert Zeidman, who each opined that the "shifting" limitation could be met even if years passed between the data copying and data unavailability. Dkt. 179-8 (Melendez Tr.) 237:23-25, 238:1-5 (sealed); Dkt. 180-3 (Zeidman Tr.) 222:2-14 (sealed).

Plaintiffs assert that Amazon has waived its argument that "shifting" is indefinite because the parties agreed to the construction of the claim term. Dkt. 181 at 20-21. Plaintiffs further argue that the "shifting" limitation is definite without a temporal requirement because "copying and unavailability are connected by the use of prespecified parameters and the system dynamics." Dkt. 195 at 13.

In an order reaffirming the claim construction of "shifting," the District Court denied Amazon's proposed amendment to the agreed construction of the "shifting" limitation. Dkt. 219 at 2. The District Court found that the construction was supported by the intrinsic record and did not require further clarification. *Id.* Amazon has not shown by clear and convincing evidence that a person of ordinary skill in the art would not understand the scope of the "shifting" limitation. *See Nautilus*, 572 U.S. at 910 (stating that "absolute precision is unattainable" and "the certainty which the law requires in patents is not greater than is reasonable, having regard to their subject-matter"). Therefore, the undersigned recommends that the District Court deny Amazon's motion for summary judgment that the Asserted Claims are invalid for indefiniteness and grant Plaintiffs' motion for partial summary judgment that the "shifting" limitation is definite.

4. Enablement

A specification must enable one of ordinary skill in the art to make and use the claimed invention without undue experimentation. *Takeda Pharm. Co. v. Zydus Pharms. USA, Inc.*, 743

F.3d 1359, 1368-69 (Fed. Cir. 2014) (citing 35 U.S.C. § 112). A claim is invalid if undue experimentation is needed to practice the claims. *In re Wands*, 858 F.2d 731, 737 (Fed. Cir. 1988). Courts consider the following factors to determine whether experimentation is undue: (1) the quantity of experimentation necessary; (2) the amount of direction or guidance presented; (3) the presence or absence of working examples; (4) the nature of the invention; (5) the state of the prior art; (6) the relative skill of those in the art; (7) the predictability or unpredictability of the art; and (8) the breadth of the claims. *Id.* Enablement is a question of law that is based on underlying factual determinations. *Amgen Inc. v. Sanofi Aventisub LLC*, 987 F.3d 1080, 1084 (Fed. Cir. 2021).

Plaintiffs assert that Amazon has submitted no evidence that the claim element containing "prespecified parameters" is not enabled. Dkt. 181 at 22. Plaintiffs cite the July 8, 2020 decision in this case by the Court of Appeals for the Federal Circuit, in which the court found the claim term to be definite "because the scope and meaning of 'prespecified parameters' is reasonably ascertainable by a skilled artisan." *Via Vadis v. Blizzard Entm't*, 815 F. App'x 539, 546 (Fed. Cir 2020). Amazon disputes that the Federal Circuit decided the issue of enablement because (1) the discussion of "prespecified parameters" related to "between data storage means and the computer unit," and (2) the Federal Circuit's opinion addresses indefiniteness, which is a separate statutory requirement from lack of enablement. Dkt. 187 at 22 n.9 (citing *Via Vadis*, 815 F. App'x at 542).

Amazon's expert Dr. Ratner opined that a person of ordinary skill in the art would have to engage in significant experimentation to implement a method that included the prespecified parameters limitation because the '521 Patent does not explain what the parameters between data storage means would include or how they would be detected. *See* Dkt. 187 at 24; Dkt. 187-2 (Ratner Expert Report) ¶¶ 146, 169. Plaintiffs rely on the testimony of their expert Dr. Melendez

to refute Dr. Ratner's conclusion that undue experimentation would be required. Dkt. 195 at 14 (citing Dkt. 182-4 (Melendez Expert Report) ¶¶ 91, 125, 127, 132-33, 172-73 (sealed)).

Based on this summary judgment evidence, the undersigned finds that there is a genuine issue of material fact as to whether undue experimentation is needed to practice the claims. Consequently, there is a genuine issue of material fact as to enablement that precludes summary judgment. *See CFMT, Inc. v. Yieldup Int'l Corp.*, 349 F.3d 1333, 1340 (Fed. Cir. 2003) (remanding for determination whether genuine issue of material fact required parties to proceed to trial on enablement issue).

B. Non-infringement

Literal infringement of a properly construed claim is a question of fact. *Applied Med. Res. Corp. v. U.S. Surgical Corp.*, 448 F.3d 1324, 1332 (Fed. Cir. 2006). To prevail on a motion for summary judgment of noninfringement, a defendant must show that no genuine issue exists as to whether the accused products are "encompassed by the claims." *Wavetronix LLC v. EIS Elec. Integrated Sys.*, 573 F.3d 1343, 1358 (Fed. Cir. 2009).

Amazon argues that the Court should grant summary judgment that it did not infringe the Asserted Claims because the Accused BitTorrent System lacks the claimed "data storage means," and also does not satisfy the "shifting" limitation. Dkt. 179 at 7. Amazon further argues that Plaintiffs have no evidence to support their direct infringement claim under a theory of divided infringement. *Id.* Plaintiffs contend that disputed fact issues preclude summary judgment on all three grounds. Dkt. 189 at 8-24.

1. Data Storage Means

"Data storage means" is a means-plus-function limitation. Dkt. 59 at 6-7. A means-plus-function limitation "literally covers an accused device if the relevant structure in the accused

device performs the identical function recited in the claim and that structure is identical or equivalent to the corresponding structure in the specification." *Intellectual Sci. & Tech., Inc. v. Sony Elecs., Inc.*, 589 F.3d 1179, 1183 (Fed. Cir. 2009). The District Court construed "data storage means" as "one or more memory cells, each cell storing: (1) one field of information; and (2) the other locations within the system where copies of the cell are located; where the information in every cell is copied the same number of times throughout the system." Dkt. 67 at 4.

Amazon argues that Plaintiffs have "not identified anything in BitTorrent" that meets the definition of "data storage means." Dkt. 179 at 12. Amazon asserts that the "other locations" requirement is not satisfied because a person of ordinary skill in the art would understand it to mean "all other locations within the system where copies of the cell are located." Id. Amazon contends that Plaintiffs cannot show that all locations store data copies because (1) the number of users on the BitTorrent peer-to-peer system is constantly in flux and an unlimited number of peers can download the pieces of a file; and (2) each peer is only informed about the location of stored data by peers with which it communicates, which may be a subset of peers in the swarm. Id. at 12-13. Amazon further argues that the "same number" requirement is not satisfied because BitTorrent does not require each file or file piece to be copied the same number of times throughout the system. Id. at 14.

a. Other Locations

The District Court specifically rejected Amazon's request to modify its claim construction to add "all of" to "other locations within the system where copies of the cell are located." Dkt. 67 at 3. Accordingly, the "data storage means" infringement analysis does not include a requirement of "all locations." Because Amazon's motion for summary judgment is based on a requirement that

is not present in the "other locations" limitation, the undersigned recommends that its motion for summary judgment of non-infringement be denied.

b. Same Number

Plaintiffs assert that Amazon similarly attempts to recast the "same number" limitation as fixed and unable to change over time, despite the Court's claim construction containing no such requirement. Dkt. 189 at 11. Even adopting Amazon's interpretation, Plaintiffs cite testimony of Robert Long, a Principal Systems Development Engineer at Amazon, and Zeidman's expert report and testimony as evidence that the "same number" limitation was met in the BitTorrent "End Game" and "Slice of Time" modes:

Amazon used BitTorrent to distribute entire files to i[t]s customers. The Amazon peers and supporting infrastructure operated to that ultimate goal—distributing all the pieces of the data to each peer. When Amazon's BitTorrent peers obtained all of the pieces of the file to be distributed they became "seeders" in Amazon's BitTorrent swarm.

Id. at 14 (footnotes omitted) (citing Dkt. 190-5 (Long Tr.) 29:17-19, 41:24-42:3, 53:11-16, 55:4-7 (sealed)). "A collection of seeders in the swarm had copies of each piece of the computer game file stored the 'same number of times' as every other piece, namely the number of times equal to the number of seeds in 'the system." Id. (citing Dkt. 190-1 (Zeidman Expert Report) ¶¶ 94-95 (sealed); Dkt. 190-6 (Zeidman Tr.) 176:5-15 (sealed)).

Accordingly, Plaintiffs have presented evidence creating a genuine dispute of material fact regarding whether the Accused BitTorrent System meets the "same number" limitation, which precludes summary judgment on noninfringement due to the lack of "data storage means." Because

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¹ Plaintiffs state that the "Slice of Time" mode "occurs when the Amazon peers are working toward distributing all of the pieces" to meet "the 'End Game' objective of the swarm, but have not reached this goal." Dkt. 189 at 15 (citing Dkt. 190-1 (Zeidman Expert Report) ¶¶ 92-95 (sealed)).

there is a factual dispute relating to "End Game" mode, the Court need not address Amazon's remaining noninfringement arguments regarding "data storage means."

2. Shifting

The District Court construed "shifting" as "data is copied to a new location and no longer available at one of the previous locations." Dkt. 59 at 6, 39. Amazon argues that Plaintiffs have no evidence that BitTorrent meets the "shifting" limitation because (1) data is never globally unavailable, and (2) "choking" does not meet the requirements. Dkt. 179 at 16-20.

a. Unavailability

Amazon contends that Plaintiffs have no evidence showing the Accused BitTorrent System meets the requirement that data "is no longer available at one of the previous locations" because "when Amazon's S3 Seeder provides copies of pieces of the requested objects to BitTorrent clients, those pieces *remain available* at Amazon's S3 Seeder." Dkt. 179 at 17. Also, "when BitTorrent client applications share pieces of files by copying them from one peer to another, those pieces *remain available* at the peer from which they were copied, as well as at every other peer that contained those pieces." *Id*.

Amazon's expert witness challenges the findings of Plaintiffs' expert witness, stating that he disregards the agreed construction and fails to explain "whether the data must be no longer available to all peers attempting to access" it or "just one peer" in rendering his opinion that the "shifting" limitation is met. *Id.* (citing Dkt. 180-1 (Ratner Expert Report) ¶ 165 (sealed)). Plaintiffs respond that, in arguing that they must establish global or permanent unavailability, Amazon attempts to read requirements into the limitation that do not exist. Dkt. 189 at 18. Plaintiffs argue that their expert's opinion is evidence that the BitTorrent protocol results in unavailability of data,

which is all that is required to satisfy the "shifting" limitation. *Id.* at 19 (citing, *inter alia*, Dkt. 190-6 (Zeidman Tr.) 233:11-18 (sealed)).

The parties thus have presented a "battle of the experts," creating a fact issue that precludes summary judgment on noninfringement of the "shifting" limitation. *See Edwards Sys. Tech., Inc. v. Digital Control Sys., Inc.*, 99 F. App'x 911, 921 (Fed. Cir. 2004) (stating that "battle of the experts" renders summary judgment improper).

b. Choking

Choking is a designation that two peers will not exchange file pieces. Dkt. 179 at 18. "When peer A chokes peer B, it makes the information on peer A unavailable to peer B." *Id.* (quoting Dkt. 180-3 (Zeidman Tr.) 204:13-14 (sealed)). However, data on peer C is still available to peer B, and vice-versa. *Id.* (quoting Dkt. 180-3 (Zeidman Tr.) 204:15-19 (sealed)) A peer later may send an "unchoke" message and continue copying data to the previously choked peer. Dkt. 179 at 19 (citing Dkt. 180-1 (Ratner Expert Report) ¶ 174 (sealed)).

Amazon argues that BitTorrent's "choking" functionality does not satisfy the "shifting" limitation because data is unavailable only temporarily. *Id.* Amazon again uses its expert to attack Plaintiffs' expert, who opined that permanent unavailability is not required to satisfy the shifting limitation. *Id.* at 19-20 (citing Dkt. 180-1 (Ratner Expert Report) ¶¶ 174-75 (sealed)). With respect to choking, the record again comprises a "battle of the experts" creating a fact issue that precludes summary judgment. *Edwards Sys. Tech., Inc.*, 99 F. App'x at 921.

3. Divided Infringement

Direct infringement occurs "where all steps of a claimed method are performed by or attributable to a single entity." *Akamai Techs., Inc. v. Limelight Networks, Inc.*, 797 F.3d 1020, 1022 (Fed. Cir. 2015) (en banc) (per curiam). "Divided infringement occurs when 'more than one

actor is involved in practicing the steps' and 'the acts of one are attributable to the other such that a single entity is responsible for the infringement." *Int'l Bus. Machs. Corp. v. Booking Holdings Inc.*, 775 F. App'x 674, 678 (Fed. Cir. 2019) (quoting *Akamai*, 797 F.3d at 1022). An entity is responsible for another's performance of the method steps "(1) where that entity directs or controls others' performance, and (2) where the actors form a joint enterprise." *Id.*

The parties agree that Amazon does not perform each step of the claimed method. Dkt. 189 at 22; Dkt. 193 at 14. To establish liability for direct infringement, therefore, Plaintiffs must show that Amazon either (1) directed or controlled its customers' use of BitTorrent, or (2) formed a joint enterprise with its customers.

a. Direct or Control Performance

An entity directs or controls another's performance "when an alleged infringer conditions participation in any activity or receipt of a benefit upon performance of a step or steps of a patented method and establishes the manner or timing of that performance." *Akamai*, 797 F.3d at 1023.

Amazon argues that it does not direct or control its customers' use of BitTorrent and therefore cannot be liable for direct infringement. Dkt. 179 at 21-22. Relying on the reports and testimony from both parties' experts, Amazon contends that "many of the steps identified by Plaintiffs are conducted on computers that are not controlled by Amazon and that are running software not provided by Amazon." *Id.* at 21 (citing Dkt. 180-1 (Ratner Expert Report) ¶ 109 (sealed); Dkt. 180-2 (Zeidman Expert Report) ¶ 117-31 (sealed); Dkt. 180-3 (Zeidman Tr.) 136:12-15 (sealed)). Amazon further contends that it did not "condition anything upon customers' use of BitTorrent, which was simply offered to users as one of several ways to access data and in fact was rarely used." *Id.* (citing Dkt. 180-1 (Ratner Expert Report) ¶ 110 (sealed); Dkt. 180-6 (Kindler Rebuttal Expert Report) ¶ 72 (sealed)).

Plaintiffs argue that Amazon "conditioned the customer benefit of significantly lower data transfer charges on implementing BitTorrent distribution for large and popular files, and instructed customers to use BitTorrent clients to do so, thus controlling the manner and timing of performance (when the client BitTorrent peers are connected to Amazon's S3 infrastructure)." Dkt. 189 at 22-23. Plaintiffs identify record evidence that Amazon customers who used BitTorrent benefitted from lower data charges under Amazon's pricing structure. Dkt. 189 at 23 n.51 (citing Dkts. 189-8 and 189-15 through 189-19). Plaintiffs also argue that Amazon "technologically conditioned the connected peers to exchange more pieces among themselves and choke more frequently by throttling the transmission speed from the Amazon S3 seeders." *Id.* at 23. Plaintiffs contend that customers' performance of the method steps required less data to be transferred directly from Amazon, resulting in lower charges. *Id.* at 23 n.52 (citing Dkt. 180-2 (Zeidman Expert Report) ¶ 416 (sealed)); Dkt. 190-12 (sealed)).

Plaintiffs have shown that a genuine issue of material fact exists as to whether Amazon conditioned lower data charges on performance of the method steps using the BitTorrent protocol, precluding summary judgment of no direct infringement. *Cf. ESW Holdings. Inc v. Roku, Inc.*, No. 6-19-CV-00044 ADA, 2021 WL 1069047 at *4 (W.D. Tex. Mar. 18, 2021) (granting summary judgment of no divided infringement based on conditioned benefit because users could enjoy accused feature without performing method steps).

b. Joint Enterprise

All actors in a joint enterprise may be charged with the acts of the other. *Akamai*, 797 F.3d at 1023 (citing RESTATEMENT (SECOND) OF TORTS § 491 cmt. b). A joint enterprise requires proof of four elements: (1) an agreement, express or implied, among the members of the group; (2) a common purpose to be carried out by the group; (3) a community of pecuniary interest in that

purpose, among the members; and (4) an equal right to a voice in the direction of the enterprise, which gives an equal right of control. *Id*.

Amazon contends that Plaintiffs have no evidence showing that it formed a joint enterprise with its customers. Dkt. 179 at 22. Amazon argues that it "simply provides a service related to BitTorrent seeding and tracking, and its customers are free to use or not use that service." *Id.* In response, Plaintiffs rely on Amazon's BitTorrent pricing structure to argue that Amazon and its customers "entered into implied agreements to carry out the common purpose of distributing data using BitTorrent." Dkt. 189 at 23 n.54. Plaintiffs further argue that "Amazon used BitTorrent to draw customers to its S3 platform, and [its] customers' use of BitTorrent for large and popular files lowers the customer's data transfer bills," which created a "community of pecuniary interest." *Id.* at 23.

Even if Plaintiffs have satisfied the first three elements of a joint enterprise, they offer no evidence that Amazon's customer have "an equal right to a voice in the direction of the enterprise, which gives an equal right of control." *Akamai*, 797 F.3d at 1023. Plaintiffs identify no evidence that Amazon's customers exerted any control at all over the alleged enterprise. *See Agri-Labs Holding LLC v. Taplogic, LLC*, 304 F. Supp. 3d 773, 796 (N.D. Ind. 2018) (finding method steps not attributable to defendant where plaintiff submitted no evidence that defendant entered joint enterprise with end-users); *cf. Tex. Dep't of Transp. v. Able*, 35 S.W.3d 608, 616 (Tex. 2000) (affirming finding of joint enterprise where plaintiff presented evidence showing members' "mutual right to control direction and management of the enterprise"). Accordingly, there is no genuine dispute as to any material fact that Amazon and its customers did not form a joint enterprise, and summary judgment for Amazon is recommended on that basis.

V. Recommendation

Based on the foregoing, the undersigned Magistrate Judge **RECOMMENDS** that the District Court **GRANT IN PART AND DENY IN PART** Amazon's Motion for Summary Judgment of Non-infringement and Invalidity (Dkt. 179). The undersigned **RECOMMENDS** that the District Court **GRANT** Amazon's motion for partial summary judgment and find as a matter of law that Amazon and its customers did not form a joint enterprise and otherwise **DENY** Amazon's Motion for Summary Judgment of Non-infringement and Invalidity.

The undersigned further **RECOMMENDS** that the District Court **GRANT IN PART AND DENY IN PART** Plaintiffs' Motion for Summary Judgment on Validity (Dkt. 181). The undersigned **RECOMMENDS** that the District Court **GRANT** Plaintiffs' motion for partial summary judgment and find as a matter of law that the "shifting" limitation is definite and otherwise **DENY** Plaintiffs' Motion for Summary Judgment on Validity.

IT IS FURTHER ORDERED that this case be removed from the Magistrate Court's docket and returned to the docket of the Honorable Lee Yeakel.

VI. Warnings

The parties may file objections to this Report and Recommendation. A party filing objections must specifically identify those findings or recommendations to which objections are being made. The District Court need not consider frivolous, conclusive, or general objections. *See Battle v. United States Parole Comm'n*, 834 F.2d 419, 421 (5th Cir. 1987). A party's failure to file written objections to the proposed findings and recommendations contained in this Report within fourteen (14) days after the party is served with a copy of the Report shall bar that party from de novo review by the District Court of the proposed findings and recommendations in the Report and, except on grounds of plain error, shall bar the party from appellate review of unobjected-to

proposed factual findings and legal conclusions accepted by the District Court. *See* 28 U.S.C. § 636(b)(1)(c); *Thomas v. Arn*, 474 U.S. 140, 150-53 (1985); *Douglass v. United Servs. Auto. Ass'n*, 79 F.3d 1415, 1428-29 (5th Cir. 1996) (en banc).

SIGNED on January 18, 2022.

SUSAN HIGHTOWER

UNITED STATES MAGISTRATE JUDGE